Reference Table: This table provides information for reviewers (IRDs to RbRs)

IRD_	req_	source i	desti	ible provides infol	paragra	req	seg_	req_type	s_ve_	s_ver	a_ver_	a_ver_	req_categ	toxt	С
id_	key	nterfac	interface	text	 paragra ph_id	_key	allocat	req_type	method	_status	method	status	ory	text	c r
NSI-		N/A	N/A		NSI-	6237	CSMS	procedur					·		r
0010	1048	N/A	N/A	NSI, responsible for	0010#B	0237	CSIVIS	al		un- verified		un- verified		NSI, responsible for	
				EOSDIS "Mission										EOSDIS "Mission	
				Success" network										Success" network	
				services, shall provide										services, shall provide	
				network connectivity										network connectivity to	
				to the following ESC										the following ECS	
				facilities:										facilities:	
				a. ECS at the GSFC										a. ECS at the	
				DAAC, Goddard Space										GSFC DAAC, Goddard	
				Flight Center										Space Flight Center	
				(GSFC), Greenbelt,										(GSFC), Greenbelt,	
				Maryland										Maryland	
				b. ECS Operations										b. ECS	
				Center (EOC),										Operations Center	
				Goddard Space Flight										(EOC), Gorddard Space	
				Center (GSFC),										Flight Center (GSFC),	
				Greenbelt, Maryland										Greenbelt, Maryland	
				c. System										c. System	
				Monitoring and										Monitoring and	
				Coordination facility										Coordination facility	
				(SMC), Goddard Space										(SMC), Goddard Space	
				Flight Center										Flight Center (GSFC),	
				(GSFC), Greenbelt,										Greenbelt, Maryland	
				Maryland										d. ECS at the	
				d. ECS at the EDC										EDC DAAC, Earth	
				DAAC, Earth										Resources Observation	
				Resources Observation										System (EROS) Data	
				System (EROS) Data										Center (EDC), Sioux	
				Center (EDC), Sioux										Falls, South Dakota	
				Falls, South Dakota										e. ECS at the	
				e. ECS at the JPL										JPL DAAC, Jet	
				DAAC, Jet										Propulsion Laboratory	
				Propulsion Laboratory										(JPL), Pasadena,	
				(JPL), Pasadena,										California	
				California										f. ECS at the	
				f. ECS at the LaRC										LaRC DAAC, Langley	
				DAAC, Langley										Research Center	
				Research Center										(LaRC), Hampton,	

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IRD_ id	req_ key	source_i nterfac	desti_ interface	text	ccr	paragra ph_id	req _key	seg_ allocat	req_type	s_ve_ method	s_ver _status	a_ver_ method	a_ver_ status	req_categ ory	text	c c
				(LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR) Facility (ASF), Fairbanks, Alaska i. ECS at the MSFC DAAC, Marshall Space Flight Center (MSFC), Huntsville, Alabama											Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska	r
						NSI- 0010#A	8204	CSMS	procedur al	inspecti on	un- verified	demo	un- verified	mission essential	EOSDIS "Mission Success" network	9 6 - 1 2 1 4

IRD_ id	req_	source_i	desti_ interface	text	ccr	paragra	req	seg_ allocat	req_type	s_ve_ method	s_ver	a_ver_ method	a_ver_	req_categ	text	c
10	key	nterfac	interface			ph_id	_key	anocat		metnoa	_status	metnoa	status	ory		c r
NSI-		N/A	N/A			NSI-	6238	CSMS	procedur		un-		un-		LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia	
0020	1049	IVA	IV/A	NSI shall provide support for TCP/IP communication <b>proteols</b> protocols and services to ESN.		0020#B			al		verified		verified		NSI shall provide support for TCP/IP communication protocols and services to ESN.	
						NSI- 0020#A	6633	N/A_p rocedu ral	procedur al	not verified by ECS	N/A_pro cedural	not verified by ECS	N/A_proc edural	N/A_proc edural	NSI shall provide support for TCP/IP communication protocols and services to ESN.	9 6 - 0 9 0 9 A
NSI- 0040	1051	NSI	ECS	NSI shall make available to ECS informatin information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.		NSI- 0040#B	6240	CSMS	interface		un- verified		un- verified		NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	
						NSI- 0040#A	6638	CSMS	interface	demo	un- verified	demo	un- verified	mission essential	NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	9 6 - 0 9 0 9 A
NSI- 0080	1055	ECS	NSI	ECS shall have the capability of sending and NSI shall have the		NSI- 0080#B	6244	CSMS	interface		un- verified		un- verified		ECS shall have the capability of sending and NSI shall have the	

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IRD_ id	req_ key	source_i nterfac	desti_ interface	text	ccr	paragra ph_id	req _key	seg_ allocat	req_type	s_ve_ method	s_ver _status	a_ver_ method	a_ver_ status	req_categ ory	text	c c r
				capability of receiving notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.		NSI- 0080#A	6646	CSMS	interface   security	demo	un- verified	demo	un- verified	mission essential	capability of receiving notification of security breaches at ESC ECS facilities that could affect NSI and other EOSDIS sites.  ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ECS	9 6 - 0 9 0 9 A
															facilities that could affect NSI and other EOSDIS sites.	

Reference Table (continue): This table provides information for reviewers (RbRs to L4s)

RbR_id	RbR_	text	сс	L4_id	req	r	req_type	verification		text	C
	key		r		_key	e		_method	_status		С
NSI-0010#B	6237	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities:  a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland  b. ECS Operations Center (EOC), Gorddard Space Flight Center (GSFC), Greenbelt, Maryland  c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland  d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota  e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California  f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia ECS at the NSIDC DAAC, University of Colorado, National Snow	r		_key	e 1		_method	_status		
NSI-0010#A	8204	and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland	96 - 12 14								
NSI-0020#B	6238	c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia  NSI shall provide support for TCP/IP communication protocols and services to									
NSI-0020#A	6633	ESN.  NSI shall provide support for TCP/IP communication protocols and services to ESN.	96 - 09 09								$\dagger$
			Α								

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										rage / Of 11
		information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.		60371			al			capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following:  a. Site Fault Management Applications  b. EBnet  c. ASTER  b. NOAA(SAA)  e. Landsat (MMO)  f. NSI  g. NOLAN.
				C-MSS- 60160	10730	Α	operatio nal	test	unverified	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from:  a. Site fault management applications b. Other external systems as defined in Section 5.1.  7 0 A
NSI-0040#A	6638	NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	96 - 09 09 A	C-MSS- 60160	10730	Α	operatio nal	test	unverified	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from:  a. Site fault management applications b. Other external systems as defined in Section 5.1.  9  0  A
NSI-0080#B	6244	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ESC facilities that could affect NSI and other EOSDIS sites.		C-MSS- 70478	7838	В	interface	test		The MSS Security Management Application Service shall have the capability to send to NSI, notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.
				C-MSS- 10080	11587	I R 1	interface	test	unverified	The MSS shall interface with the NASA Science Internet (NSI) to exchange data identified in Table 4.1-1 as specified in ECS/NSI IRD, 05-41-17.
NSI-0080#A	6646	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.	96 - 09 09 A	C-MSS- 10080	11587	I R 1	interface	test	unverified	The MSS shall interface with the NASA Science Internet (NSI) to exchange data identified in Table 4.1-1 as specified in ECS/NSI IRD, 05-41-17.

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Change Table. 1: This table identifies modifications to existing IRD NSI requirements in the 110896 baseline version of the RTM database

IRD_id	req_		destination	text	ccr
	key	erface	_interface		
NSI- 0010	1048	N/A	N/A	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ESC facilities:  a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland  b. ECS EOS Operations Center (EOC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland  c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland  d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota  e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado  h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR) Facility (ASF), Fairbanks, Alaska  i. ECS at the MSFC DAAC, Marshall Space Flight Center (MSFC), Huntsville, Alabama	
NSI-0020	1049	N/A	N/A	NSI shall provide support for TCP/IP communication proteols protocols and services to ESN ECS.	
NSI-0040	1051	NSI	ECS	NSI shall make available to ECS informatin information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	

Change Table. 2: This table identifies modifications to existing RbR NSI requirements in the 110896 baseline version of the RTM database

RbR_i d	req _key	seg_ alloca	req_type	s_ve_ metho	s_ver _status	a_ver_ method	a_ver_ status	req_cate gory	text	ccr
NSI- 0010#B	6237	tCSMS	procedural	d demo	un-verified	demo	un- verified	N/A proc edural	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities:  a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland  b. ECS EOS Operations Center (EOC), Gorddard Space Flight Center (GSFC), Greenbelt, Maryland  c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland  d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota  e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California  f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia  g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado  h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska	
NSI- 0020#B	6238	CSMS	procedural	not verified by ECS	un- verified	not verified by ECS	un- verified	N/A proc edural	NSI shall provide support for TCP/IP communication protocols and services to ESN-ECS.	
NSI- 0020#A	6633	N/A_pr ocedur	procedural	not verified	N/A_pro cedural	not verified	N/A_proc edural	N/A_proc edural	NSI shall provide support for TCP/IP communication protocols and services to	96- 0909A

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RbR_i d	req _key	seg_ alloca t	req_type	s_ve_ metho d	s_ver _status	a_ver_ method		req_cate gory	text	ccr
NSI- 0080#B	6244	al CSMS	interface	by ECS demo	un- verified	by ECS demo	un- verified	essential	ESN-ECS.  ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ESC ECS facilities that could affect NSI and other EOSDIS sites.	

Table. 3: New NSI IRD requirement

IRD_id	req_ key	source_ interface	destination _interface	text
<u>NSI-0032</u>	New	<u>ECS</u>	NSI	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of faults in ECS networks that may affect the quality of NSI services between ECS and its users.

Table. 3: RbR requirements

RbR_i d	req _key	seg_ alloca t	req_typ e		s_ver _status	a_ver_ method		req_cate gory	text
<u>NSI-</u> 0032#A	New	CSMS	interface	demo	un- verified	demo	un- verified	mission essential	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of faults in ECS networks that may affect the quality of NSI services between ECS and its users.
<u>NSI-</u> 0032#B	New	<u>CSMS</u>	interface	<u>demo</u>	un- verified	demo	un- verified	mission essential	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of faults in ECS networks that may affect the quality of NSI services between ECS and its users.

Table. 4: Linkage to L4s

RbR_Id	L4s
NSI-0032#A	C-MSS-60210
NSI-0032#A	C-MSS-60220
NSI-0032#B	C-MSS-60210
NSI-0032#B	C-MSS-60220

Table 5: RBR Id -to- Ext\_Interface\_Id

RbR_Id	Ext_Interface_Id
NSI-0032#A	NSI#Fault Notification From ECS
<u>NSI-0032#B</u>	NSI#Fault Notification From ECS